

IN THE CLAIMS:

Please cancel claims 9, 23, 45 and 50 without prejudice or disclaimer of subject matter. The claims, as pending in the subject application, now read as follows:

1. (Previously presented) An image processing apparatus for variable magnification processing of output information, comprising:

holding means for holding output images in a first size and an output position thereof, and holding output images in a second size and an output position thereof, wherein each of said output images is expressed by a plurality of objects, and each of said objects is assigned rendering attributes corresponding to a size and an output position;

selection means for selecting a desired image from the output images held by said holding means, and designating an output size of the selected image;

generation means for generating each output image independently for each of said plurality of objects expressing the image selected by said selection means corresponding to the output size on the basis of a ratio of change in output image size between the first and second sizes defined by the rendering attributes of each of said plurality of objects held by said holding means compared to the output size of the image selected by said selection means;

determination means for determining each rendering position independently of the output images for each of said plurality of objects expressing the image selected by said selection means corresponding to the output position on the basis of a ratio of change in output position between the first and second positions defined by the rendering attributes

of each of said plurality of objects held by said holding means compared to the image selected by said selection means; and

rendering means for rendering each output image independently for each of said plurality of objects expressing the image selected by said selection means generated by said generation means at the rendering position determined by said determination means, wherein the rendered output image includes frame information of image information, the frame information including fitting information fitted into a frame of the frame information by a fitting means with the fitting information designated by a designation means for the fitting information, and wherein said rendering means displays the output image generated by said generation means on a display screen of a display device.

2. (Original) The apparatus according to claim 1, wherein said selection means selects the image from the output images in the first size held by said holding means.

3. (Canceled)

4. (Previously presented) The apparatus according to claim 1, further comprising output means for outputting rendering information of said rendering means to an output device that permanently visually displays the rendering information in units of pages.

5. (Previously presented) An image processing apparatus for variable magnification processing of output information, comprising:

holding means for holding output images in a first size and an output position thereof, and holding output images in a second size and an output position thereof, wherein each of said output images is expressed by a plurality of objects, and each of said objects is assigned rendering attributes corresponding to a size and an output position;

selection means for selecting a desired image from the output images held by said holding means, and designating an output size of the selected image;

generation means for generating each output image independently for each of said plurality of objects expressing the image selected by said selection means corresponding to the output size on the basis of a ratio of change in output image size between the first and second sizes defined by the rendering attributes of each of said plurality of objects held by said holding means compared to the output size of the image selected by said selection means;

determination means for determining each rendering position independently of the output images for each of said plurality of objects expressing the image selected by said selection means corresponding to the output position on the basis of a ratio of change in output position between the first and second positions defined by the rendering attributes of each of said plurality of objects held by said holding means compared to the image selected by said selection means; and

rendering means for rendering each output image independently for each of said plurality of objects expressing the image selected by said selection means generated by said generation means at the rendering position determined by said determination means,

wherein the rendered output image includes frame information of image information, the frame information including fitting information fitted into a frame of the frame information by a fitting means with the fitting information designated by a designation means for the fitting information, and wherein said rendering means further renders the output image generated by said generation means as print information to a printing apparatus that prints the output image using the print information.

6. (Canceled)

7. (Previously presented) The apparatus according to claim 1, wherein after fitting by said fitting means, a rendering size of the frame information of the image selected by said selection means is allowed to change, and when the rendering size of the frame information is changed after fitting, a fitting position of the fitting information is changed in correspondence with movement of the rendering position determined by said determination means to hold a fitting positional relationship with the frame information.

8. (Original) The apparatus according to claim 7, wherein when the fitting information designated by said designation means is image information, said fitting means does not change the fitting information irrespective of the change in size of the frame information of the image selected by said selection means, and renders an image in the fitting information, which corresponds to an interior of a frame of the frame information, as the fitting information in the frame.

9. (Canceled)

10. (Original) The apparatus according to claim 9, wherein when a size of the character information in a row direction falls outside the frame, said fitting means fits the character information by automatically inserting a carriage return so as to make the character information fall within the frame.

11. (Original) The apparatus according to claim 1, wherein a moving amount of a rendering position of the output image corresponding to the ratio of change in output position of the output image between the first and second sizes is compressed in the vicinity of an edge portion of an outputtable range so as to prevent the rendering position from falling outside the outputtable range of an output device upon movement of the rendering position determined by said determination means for the output image selected by said selection means.

12. to 14. (Canceled)

15. (Previously presented) An image processing method of an image processing apparatus for variable magnification processing of output information, comprising:

a holding step of holding output images in a first size and an output position thereof, and holding output images in a second size and an output position thereof, wherein

each of said output images is expressed by a plurality objects, and each of said objects is assigned rendering attributes corresponding to a size and an output position;

a selection step of selecting a desired image from the output images held in said holding step, and designating an output size of the selected image;

a generation step of generating each output image independently for each of said plurality of objects expressing the image selected in said selection step corresponding to the output size on the basis of a ratio of change in output image size between the first and second sizes defined by the rendering attributes of each of said plurality of objects held in said holding step compared to the output size of the image selected in the selection step;

a determination step of determining each rendering position independently of the output images for each of said plurality of objects expressing the image selected in said selection step corresponding to the output position on the basis of a ratio of change in output position between the first and second positions defined by the rendering attributes of each of said plurality of objects held in said holding step compared to the image selected in the selection step; and

a rendering step of rendering each output image used for visualization, the output images rendered independently for each of said plurality of objects expressing the image selected in said selection step generated in the generation step at the rendering position determined in the determination step, wherein the rendered output image includes frame information of image information, the frame information including fitting information fitted into a frame of the frame information by a fitting step with the fitting information designated by a designation step for the fitting information, and wherein the

rendering step includes displaying the output image generated in said generation step on a display screen of a display device.

16. (Previously presented) The method according to claim 15, wherein the selection step includes a step of selecting the image from the output images in the first size held by said holding means.

17. (Canceled)

18. (Previously presented) The method according to claim 15, further comprising an output step of outputting rendering information in the rendering step to an output device that permanently visually displays the rendering information in units of pages.

19. (Previously presented) An image processing method of an image processing apparatus for variable magnification processing of output information, comprising:

a holding step of holding output images in a first size and an output position thereof, and holding output images in a second size and an output position thereof, wherein each of said output images is expressed by a plurality objects, and each of said objects is assigned rendering attributes corresponding to a size and an output position;

a selection step of selecting a desired image from the output images held in said holding step, and designating an output size of the selected image;

a generation step of generating each output image independently for each of said plurality of objects expressing the image selected in said selection step corresponding to the output size on the basis of a ratio of change in output image size between the first and second sizes defined by the rendering attributes of each of said plurality of objects held in said holding step compared to the output size of the image selected in the selection step;

a determination step of determining each rendering position independently of the output images for each of said plurality of objects expressing the image selected in said selection step corresponding to the output position on the basis of a ratio of change in output position between the first and second positions defined by the rendering attributes of each of said plurality of objects held in said holding step compared to the image selected in the selection step; and

a rendering step of rendering each output image used for visualization, the output images rendered independently for each of said plurality of objects expressing the image selected in said selection step generated in the generation step at the rendering position determined in the determination step, wherein the rendered output image includes frame information of image information, the frame information including fitting information fitted into a frame of the frame information by a fitting step with the fitting information designated by a designation step for the fitting information, and wherein the rendering step includes a step of further rendering the output image generated in the generation step as print information to a printing apparatus that prints the output image using the print information.

20. (Canceled)



21. (Previously presented) The method according to claim 15, wherein after fitting in the fitting step, a rendering size of the frame information of the image selected in the selection step is allowed to change, and when the rendering size of the frame information is changed after fitting, a fitting position of the fitting information is changed in correspondence with movement of the rendering position determined in the determination step to hold a fitting positional relationship with the frame information.

22. (Original) The method according to claim 21, wherein when the fitting information designated in the designation step is image information, the fitting step includes the step of inhibiting the fitting information from changing irrespective of the change in size of the frame information of the image selected in the selection step, and rendering an image in the fitting information, which corresponds to an interior of a frame of the frame information, as the fitting information in the frame.

23. (Canceled)

24. (Previously presented) The method according to claim 23, wherein when a size of the character information in a row direction falls outside the frame, the fitting step includes a step of fitting the character information by automatically inserting a carriage return so as to make the character information fall within the frame.

25. (Original) The method according to claim 15, wherein a moving amount of a rendering position of the output image corresponding to the ratio of change in output position of the output image between the first and second sizes is compressed in the vicinity of an edge portion of an outputtable range so as to prevent the rendering position from falling outside the outputtable range of an output device upon movement of the rendering position determined in the determination step for the output image selected in the selection step.

26. to 28. (Canceled)

29. (Previously presented) A computer-readable memory that stores a computer-executable program code for execution by a computer of image processing for an image processing apparatus capable of variable magnification processing of output information, comprising:

a program code of a holding step of holding output images in a first size and an output position thereof, and holding output images in a second size and an output position thereof, wherein each of said output images is expressed by a plurality of objects, and each of said objects is assigned rendering attributes corresponding to a size and an output position;

a program code of a selection step of selecting a desired image from the output images held in said holding step, and designating an output size of the selected image;

a program code of a generation step of generating each output image independently for each of said plurality of objects expressing the image selected in said selection step corresponding to the output size on the basis of a ratio of change in output image size between the first and second sizes defined by the rendering attributes of each of said plurality of objects held in said holding step compared to the output sizes of the image selected in the selection step;

a program code of a determination step of determining each rendering position independently of the output images for each of said plurality of objects expressing the image selected in said selection step corresponding to the output position on the basis of a ratio of change in output position between the first and second positions defined by the rendering attributes of each of said plurality of objects held in said holding step compared to the image selected in the selection step; and

a program code of a rendering step of rendering each output image independently for each of said plurality of objects expressing the image selected in said selection step generated in the generation step at the rendering position determined in the determination step, wherein the rendered output image includes frame information of image information, the frame information including fitting information fitted into a frame of the frame information by a fitting step with the fitting information designated by a designation step for the fitting information, and wherein the rendering step displays the output image generated by said generation code on a display screen of a display device.

30. to 40. (Canceled)

41. (Previously presented) A computer-readable memory that stores a computer-executable program code for execution by a computer of image processing for an image processing apparatus capable of variable magnification processing of output information, comprising:

a program code of a holding step of holding output images in a first size and an output position thereof, and holding output images in a second size and an output position thereof, wherein each of said output images is expressed by a plurality of objects, and each of said objects is assigned rendering attributes corresponding to a size and an output position;

a program code of a selection step of selecting a desired image from the output images held in said holding step, and designating an output size of the selected image;

a program code of a generation step of generating each output image independently for each of said plurality of objects expressing the image selected in said selection step corresponding to the output size on the basis of a ratio of change in output image size between the first and second sizes defined by the rendering attributes of each of said plurality of objects held in said holding step compared to the output sizes of the image selected in the selection step;

a program code of a determination step of determining each rendering position independently of the output images for each of said plurality of objects expressing the image selected in said selection step corresponding to the output position on the basis of a ratio of change in output position between the first and second positions defined by the

rendering attributes of each of said plurality of objects held in said holding step compared to the image selected in the selection step; and

a program code of a rendering step of rendering each output image independently for each of said plurality of objects expressing the image selected in said selection step generated in the generation step at the rendering position determined in the determination step, wherein the rendered output image includes frame information of image information, the frame information including fitting information fitted into a frame of the frame information by a fitting step with the fitting information designated by a designation step for the fitting information, and wherein the rendering step includes a step of further rendering the output image generated in the generation step as print information to a printing apparatus that prints the output image using the print information.

42. (Previously presented) The apparatus according to claim 5, wherein said selection means selects the image from the output images in the first size held by said holding means.

43. (Previously presented) The apparatus according to claim 5, wherein after fitting by said fitting means, a rendering size of the frame information of the image selected by said selection means is allowed to change, and when the rendering size of the frame information is changed after fitting, a fitting position of the fitting information is changed in correspondence with movement of the rendering position determined by said determination means to hold a fitting positional relationship with the frame information.

44. (Previously presented) The apparatus according to claim 43, wherein when the fitting information designated by said designation means is image information, said fitting means does not change the fitting information irrespective of the change in size of the frame information of the image selected by said selection means, and renders an image in the fitting information, which corresponds to an interior of a frame of the frame information, as the fitting information in the frame.

45. (Canceled)

46. (Previously presented) The apparatus according to claim 45, wherein when a size of the character information in a row direction falls outside the frame, said fitting means fits the character information by automatically inserting a carriage return so as to make the character information fall within the frame.

47. (Previously presented) The apparatus according to claim 5, wherein a moving amount of a rendering position of the output image corresponding to the ratio of change in output position of the output image between the first and second sizes is compressed in the vicinity of an edge portion of an outputtable range so as to prevent the rendering position from falling outside the outputtable range of an output device upon movement of the rendering position determined by said determination means for the output image selected by said selection means.

48. (Previously presented) The method according to claim 19, wherein after fitting in the fitting step, a rendering size of the frame information of the image selected in the selection step is allowed to change, and when the rendering size of the frame information is changed after fitting, a fitting position of the fitting information is changed in correspondence with movement of the rendering position determined in the determination step to hold a fitting positional relationship with the frame information.

49. (Previously presented) The method according to claim 48, wherein when the fitting information designated in the designation step is image information, the fitting step includes the step of inhibiting the fitting information from changing irrespective of the change in size of the frame information of the image selected in the selection step, and rendering an image in the fitting information, which corresponds to an interior of a frame of the frame information, as the fitting information in the frame.

50. (Canceled)

51. (Previously presented) The method according to claim 50, wherein when a size of the character information in a row direction falls outside the frame, the fitting step includes a step of fitting the character information by automatically inserting a carriage return so as to make the character information fall within the frame.

52. (Previously presented) The method according to claim 19, wherein a moving amount of a rendering position of the output image corresponding to the ratio of

change in output position of the output image between the first and second sizes is compressed in the vicinity of an edge portion of an outputtable range so as to prevent the rendering position from falling outside the outputtable range of an output device upon movement of the rendering position determined in the determination step for the output image selected in the selection step.